

## Wagner, Carolyn (DPH)

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**From:** Condon, Suzanne (DPH)  
**Sent:** Friday, July 02, 2010 10:39 AM  
**To:** Tyson, Julie (DPH); Round, Margaret (DPH); Steele, Martha (DPH)  
**Subject:** Fw: C&D Wood Scope of Work - Covanta Comments  
**Attachments:** July 2 2010 - Covanta Comments on C and D Scope of Work.doc

**Follow Up Flag:** Follow up  
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**From:** Colman, James (DEP)  
**To:** Kwetz, Barbara (DEP); Doucett, James (DEP); West, Carol.Rowan (DEP); Weinstein, Sarah (DEP); Condon, Suzanne (DPH); Round, Margaret (DPH)  
**Sent:** Fri Jul 02 10:29:31 2010  
**Subject:** FW: C&D Wood Scope of Work - Covanta Comments

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**From:** [prvs=17921871de=dgrasso@covantaenergy.com](mailto:prvs=17921871de=dgrasso@covantaenergy.com) [<mailto:prvs=17921871de=dgrasso@covantaenergy.com>] **On Behalf Of** Grasso,Derek  
**Sent:** Friday, July 02, 2010 9:57 AM  
**To:** [james.colman@state.ma.us](mailto:james.colman@state.ma.us)  
**Subject:** C&D Wood Scope of Work - Covanta Comments

Hello Jim,

Please find attached Covanta's comments on the scope of work for the assessment on energy from C&D wood. Feel free to call me with any questions.

I hope you have a great holiday,

Derek Grasso  
203-214-4416



July 2, 2010

Mr. James C. Colman  
Assistant Commissioner  
Massachusetts Department of Environmental Protection  
Bureau of Waste Prevention  
1 Winter Street, 7<sup>th</sup> Floor  
Boston, MA 02108

Sent via email to [james.colman@state.ma.us](mailto:james.colman@state.ma.us)

Re: Scope of Work: Assessment of Construction and Demolition Derived Wood Used for Fuel  
Comments of Covanta Energy Corporation

Dear Mr. Colman,

On behalf of the Covanta Energy Corporation (Covanta), I offer the following comments regarding the above-referenced scope of work (scope). Covanta owns and/or operates over 40 energy-from waste (EfW) facilities in the U.S. that convert municipal solid waste into energy. Four of them are located in Massachusetts. In addition, our company operates eight biomass-fired energy facilities; six in California and two in Maine. We believe that recovery of energy from waste that cannot be recycled or reused, when done in a modern, well-controlled and regulated energy production facility, is the best way to manage it.

It should be noted that under the Massachusetts Waste Ban Regulations (310 CMR 19.017), the Commonwealth's EfW facilities can and sometimes do combust C&D wood that has been separated from other C&D waste. These facilities operate with state-of-the-art pollution control equipment, monitor emissions continuously, and frequently test for emissions of heavy metals, hydrochloric acid, and dioxins/furans. The practice of combusting C&D wood is therefore already established in Massachusetts, although such wood is a very small percentage of the total amount of waste converted to energy at these facilities. Covanta understands the DEP's mandate for this project to assess the potential impacts of energy facilities that combust C&D wood exclusively or in relatively large amounts.

With that in mind, and based on Covanta's experience, we offer a comment on one issue regarding this wood that appears to be only tangentially referenced in Task I, Subtask 2, Item #3. C&D wood is usually separated at a mixed C&D waste processing facility. Gypsum wallboard is frequently crushed during the waste processing and its fines become inextricably mixed with

the wood. Covanta has found that combustion of wood with high levels of wallboard creates substantially increased emissions of sulfur dioxide (SO<sub>2</sub>), which our facilities monitor continuously. The USEPA recently (06/02/10) set a new National Ambient Air Quality Standard for SO<sub>2</sub>, the first update in 40 years. Covanta facilities that combust C&D wood sometimes find that it is necessary to use elevated levels of lime (CaO) in the spray dryer absorbers, or acid gas scrubbers, to maintain compliance with SO<sub>2</sub> emission limits. Based on our experience, there is little if any impact on facility emissions or performance when combusting (albeit relatively small amounts) of C&D wood *except for these noticeable impacts on SO<sub>2</sub> emissions*. The scope at Task 1, Subtask 3, Item #1 requires the consultant to identify “contaminants of concern”. We suggest that gypsum be specifically identified, and that its potential impact on emissions be considered in the scope for Task 1, Subtask 6, when the need for adsorption/absorption technology is evaluated. It should also be addressed in Task 1, Subtask 9, as well as in the modeling for Task II, with respect to the new SO<sub>2</sub> ambient air quality standard. The current draft scope appears to require only comparison to the PM and NO<sub>2</sub> ambient standards.

Covanta’s second comment regards the evaluation criteria in Section X. The draft scope notes that this section is still being developed. Covanta agrees with the three criteria already cited. It is imperative that this assessment be done by a technically competent, objective consultant with detailed experience in all of the tasks and subtasks. Section IX states that preference will be given for a consultant with knowledge of the New England C&D industry and markets, but that is only one important aspect. The consultant should also provide specific examples of expertise in technical evaluations of energy production facilities, including knowledge of air pollution control technologies and operational procedures. Specific examples of conducting regulatory health risk assessments and air quality modeling for actual projects should also be required. Preference should be given to consultants who have conducted technical assessments, emissions estimates and evaluations, BACT and LAER analyses, health risk assessments and air quality modeling that have been accepted by regulatory agencies for the permitting or regulation of specific projects. This assessment will be used by the MassDEP to decide if project permit applications will be accepted, so the consultant should have extensive experience in conducting work for these types of projects. It is likely that one single consultant may not have the necessary expertise in every task. Therefore, proposed subcontractors should be identified and their qualifications for the subcontracted subtask be provided as outlined above.

Covanta’s final comment concerns the order of subtasks in Task I. Specifically, Subtask 4 requires the recommendation of a C&D wood fuel specification. This subtask includes identification of current specifications, and then recommendations to revise or improve these specifications to meet four goals, including minimization of contaminants of concern and consistency of the product. Subsequent tasks involve evaluation of energy generation technologies, air pollution control systems, public health impacts and risk assessments, apparently using as a basis the fuel specification developed in Task 4. Covanta offers the possibility that perhaps this may be “putting the cart before the horse”. It may be worthwhile to first evaluate existing wood fuel processing procedures and specifications, and conduct analyses based upon those instead of a hypothetical improvement in the quality of the wood

fuel. Any existing variation in wood fuel consistency, and current levels of CoC's, would provide a "worst case" against which different energy conversion technologies could be evaluated. If the assessment shows potential problems, then it would inform the necessary level of improvements in the fuel processing and specifications.

Thank you for this opportunity to comment. If you have any questions, please email me at [dgrasso@covantaenergy.com](mailto:dgrasso@covantaenergy.com) or call at 860-889-4900 x 136

Sincerely,

Derek Grasso  
Regional Environmental Manager, New England

cc: M. Morris  
D. Peters  
G. Thein